

Amendments to Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (currently amended) A recloser for use with an electrical power distribution system, comprising:

a circuit interrupter including a primary contact and a movable contact movable relative to said primary contact between a closed position allowing current to pass through said circuit interrupter and an open position separating said contacts and preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter, said actuator including a movable shaft coupled to said movable contact of said circuit interrupter for substantially simultaneous movement therewith and without insulation being disposed between said movable contact and said movable shaft; and

an electronic control electrically connected to said actuator, said electronic control communicating with said actuator upon occurrence of a fault current to trigger said shaft to move said movable contact of said circuit interrupter from said closed position to said open position and to trigger said shaft to reclose said movable contact from said open position to said closed position upon termination of the fault current, said circuit interrupter, said actuator, and said electronic control being ungrounded.

2. (original) A recloser according to claim 1, wherein
said actuator is a solenoid.

3. (original) A recloser according to claim 1, wherein
said actuator is located adjacent said circuit interrupter.

4. (cancelled)

5. (original) A recloser according to claim 1, wherein

said circuit interrupter includes a dielectric housing enclosing said movable contact; each of said actuator and said electronic control are received in a housing with said dielectric housing connected to said housing of said actuator and said electronic control.

6. (currently amended) A recloser for use with an electrical power distribution system, comprising: according to claim 1, wherein

a circuit interrupter including a primary contact and a movable contact movable relative to said primary contact between a closed position allowing current to pass through said circuit interrupter and an open position separating said contacts and preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter, said actuator including a movable shaft coupled to said movable contact of said circuit interrupter for substantially simultaneous movement therewith and without insulation being disposed between said movable contact and said movable shaft;

an electronic control electrically connected to said actuator, said electronic control communicating with said actuator upon occurrence of a fault current to trigger said shaft to move said movable contact of said circuit interrupter from said closed position to said open position and to trigger said shaft to reclose said movable contact from said open position to said closed position upon termination of the fault current; and

first and second terminals being ~~are~~ electrically connected to each of said circuit interrupter and said electronic control, respectively, and adapted for electrical connection to the power distribution system, and defining ~~define~~ a current path between said first terminal, said circuit interrupter, said electronic control and said second terminal, allowing current of the power distribution system to pass through said current path so that the potential of each of said circuit interrupter, said electronic control, and said second terminal, respectively, is the same as the potential of the power distribution system, and said first terminal, said circuit interrupter, said actuator, and said second terminal, being ungrounded.

7. (currently amended) A recloser for use with an electrical power distribution system, comprising: according to claim 1, wherein

a circuit interrupter including a primary contact and a movable contact movable relative to said primary contact between a closed position allowing current to pass through said circuit interrupter and an open position separating said contacts and preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter, said actuator including a movable shaft coupled to said movable contact of said circuit interrupter for substantially simultaneous movement therewith and without insulation being disposed between said movable contact and said movable shaft; and

an electronic control electrically connected to said actuator, said electronic control communicating with said actuator upon occurrence of a fault current to trigger said shaft to move said movable contact of said circuit interrupter from said closed position to said open position and to trigger said shaft to reclose said movable contact from said open position to said closed position upon termination of the fault current, said circuit interrupter, said actuator, and said electronic control ~~are~~ not being received in a grounded container.

8. (original) A recloser according to claim 1, wherein

first and second terminals are electrically connected to said circuit interrupter and said electronic control, respectively, and are remote from one another, said first and second terminals are adapted for removable connection to the power distribution system allowing complete removal of said circuit interrupter, said actuator, and said electronic control from the power distribution system thereby providing a visible break in said current path.

9. (original) A recloser according to claim 1, wherein

said movable shaft and said movable contact are connected by a threaded connection; and said electrical control is coupled to said threaded connection by a conductive wire strap.

10. (original) A recloser according to claim 1, wherein

said circuit interrupter is a vacuum interrupter.

11. (currently amended) A recloser for use with an electrical power distribution system, comprising:

a circuit interrupter movable between a closed position allowing current to pass through said circuit interrupter and an open position preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter and moving said circuit interrupter between said closed and open positions;

a rotatable handle mechanism coupled to said actuator and movable between first and second positions corresponding to said closed and open positions of said circuit interrupter, respectively; and

an electronic control electrically connected to each of said actuator and said handle mechanism for said electronic control to trigger said actuator to move said circuit interrupter from said closed position to said open position and for said handle mechanism to trigger said electronic control to cause said actuator to move said circuit interrupter from said open position to said closed position upon movement of said handle from said second position to said first position,

said circuit interrupter, said actuator, said electronic control, and said handle mechanism being ungrounded,

said handle mechanism upon movement from said second position to said first position being incapable of mechanically moving said circuit interrupter to said closed position.

12. (original) A recloser according to claim 11, wherein

said circuit interrupter includes a primary contact and a movable contact movable relative to said primary contact between said closed position with said contacts being in contact and said open position with said contacts being separated;

said actuator includes a shaft coupled to said movable contact for substantially simultaneous movement with said movable contact; and

said handle mechanism is coupled to said shaft for mechanically moving said actuator from said closed position to said open position.

13. (currently amended) A recloser for use with an electrical power distribution system, comprising: according to claim 12, wherein

a circuit interrupter including a primary contact and a movable contact movable relative to said primary contact between a closed position with said contacts being in contact thereby allowing current to pass through said circuit interrupter and an open position with said contacts being separated thereby preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter and moving said circuit interrupter between said closed and open positions, said actuator including a shaft coupled to said movable contact for substantially simultaneous movement with said movable contact, said shaft including a catch;

a rotatable handle mechanism coupled to said shaft for mechanically moving said actuator between first and second positions corresponding to said closed and open positions of said circuit interrupter, respectively, said handle mechanism upon movement from said second position to said first position being incapable of mechanically moving said circuit interrupter to said closed position, said handle mechanism includes including a bracket slidably coupled to said shaft allowing said shaft to slide between said closed and open positions, ; and said shaft includes a said catch on said shaft engaging that can engage said bracket when said handle mechanism is mechanically moved from said first position to said second position to move said actuator mechanically from said closed position to said open position without operation of said electronic control; and

an electronic control electrically connected to each of said actuator and said handle mechanism for said electronic control to trigger said actuator to move said circuit interrupter from said closed position to said open position and for said handle mechanism to trigger said electronic control to cause said actuator to move said circuit interrupter from said open position to said closed position upon movement of said handle from said second position to said first position.

14. (original) A recloser according to claim 11, wherein

said electronic control recloses said actuator and said circuit interrupter from said open position to said closed position without actuation of said handle mechanism.

15. (original) A recloser according to claim 11, wherein

said electronic control substantially simultaneously triggers said actuator to move said circuit interrupter from said closed to said open position and moves said handle mechanism from said first position to said second position during permanent fault conditions.

16. (cancelled)

17. (original) A recloser according to claim 11, wherein

said actuator is disposed adjacent said circuit interrupter without insulation disposed therebetween.

18. (currently amended) A recloser for use with an electrical power distribution system, comprising: according to claim 11, wherein

a circuit interrupter movable between a closed position allowing current to pass through said circuit interrupter and an open position preventing current from passing through said circuit interrupter;

an actuator coupled to said circuit interrupter and moving said circuit interrupter between said closed and open positions;

a rotatable handle mechanism coupled to said actuator and movable between first and second positions corresponding to said closed and open positions of said circuit interrupter, respectively, said handle mechanism upon movement from said second position to said first position being incapable of mechanically moving said circuit interrupter to said closed position;

an electronic control electrically connected to each of said actuator and said handle mechanism for said electronic control to trigger said actuator to move said circuit interrupter from said closed position to said open position and for said handle mechanism to trigger said electronic control to cause said actuator to move said circuit interrupter from said open position to said closed position upon movement of said handle from said second position to said first position; and

a lever mechanism separate from said handle mechanism is electrically connected to said electronic control for preventing said electronic control from triggering said circuit interrupter and said actuator to reclose from said open position to said closed position.

19. (original) A recloser according to claim 18, wherein

said lever mechanism includes a lever and a rotatable shaft whereby rotating of said lever and said rotatable shaft triggers said electronic control to prevent said circuit interrupter and said actuator from reclosing from said open position to said closed position.

20. (original) A recloser according to claim 11, wherein

said electronic control is electrically connected to said handle mechanism through limit switches.

21. (new) A recloser according to claim 1, wherein

first and second terminals are electrically connected to each of said circuit interrupter and said electronic control, respectively, and adapted for electrical connection to the power distribution system, and define a current path between said first terminal, said circuit interrupter, said electronic control and said second terminal, allowing current of the power distribution system to pass through said current path so that the potential of each of said circuit interrupter, said electronic control, and said second terminal, respectively, is the same as the potential of the power distribution system.

22. (new) A recloser according to claim 6, wherein

said circuit interrupter includes a dielectric housing enclosing said movable contact; and each of said actuator and said electronic control are received in a housing with said dielectric housing connected to said housing of said actuator and said electronic control.

23. (new) A recloser according to claim 6, wherein

said first and second terminals are remote from one another, and

said first and second terminals are adapted for removable connection to the power distribution system allowing complete removal of said circuit interrupter, said actuator, and said electronic control from the power distribution system thereby providing a visible break in said current path.

24. (new) A recloser according to claim 6, wherein

said movable shaft and said movable contact are connected by a threaded connection; and
said electrical control is coupled to said threaded connection by a conductive wire strap.

25. (new) A recloser according to claim 6, wherein

said circuit interrupter is a vacuum interrupter.

26. (new) A recloser according to claim 7, wherein

said circuit interrupter, said actuator, and said electronic control are ungrounded.

27. (new) A recloser according to claim 7, wherein

said circuit interrupter includes a dielectric housing enclosing said movable contact; and
each of said actuator and said electronic control are received in a housing with said
dielectric housing connected to said housing of said actuator and said electronic control.

28. (new) A recloser according to claim 7, wherein

first and second terminals are electrically connected to said circuit interrupter and said electronic control, respectively, and are remote from one another, said first and second terminals are adapted for removable connection to the power distribution system allowing complete removal of said circuit interrupter, said actuator, and said electronic control from the power distribution system thereby providing a visible break in said current path.

29. (new) A recloser according to claim 7, wherein

said movable shaft and said movable contact are connected by a threaded connection; and
said electrical control is coupled to said threaded connection by a conductive wire strap.

30. (new) A recloser according to claim 7, wherein
said circuit interrupter is a vacuum interrupter.

31. (new) A recloser according to claim 11, wherein
a lever mechanism separate from said handle mechanism is electrically connected to said electronic control for preventing said electronic control from triggering said circuit interrupter and said actuator to reclose from said open position to said closed position.

32. (new) A recloser according to claim 31, wherein
said lever mechanism includes a lever and a rotatable shaft whereby rotating of said lever and said rotatable shaft triggers said electronic control to prevent said circuit interrupter and said actuator from reclosing from said open position to said closed position.

33. (new) A recloser according to claim 12, wherein
said handle mechanism includes a bracket slidably coupled to said shaft allowing said shaft to slide between said closed and open positions; and
said shaft includes a catch that can engage said bracket when said handle mechanism is mechanically moved from said first position to said second position to move said actuator mechanically from said closed position to said open position without operation of said electronic control.

34. (new) A recloser according to claim 13, wherein
said circuit interrupter, said actuator, and said electronic control are ungrounded.

35. (new) A recloser according to claim 13, wherein
said electronic control recloses said actuator and said circuit interrupter from said open position to said closed position without actuation of said handle mechanism.

36. (new) A recloser according to clam 13, wherein

said electronic control substantially simultaneously triggers said actuator to move said circuit interrupter from said closed to said open position and moves said handle mechanism from said first position to said second position during permanent fault conditions.

37. (new) A recloser according to claim 13, wherein

said actuator is disposed adjacent said circuit interrupter without insulation disposed therebetween.

38. (new) A recloser according to claim 18, wherein

said circuit interrupter, said actuator, and said electronic control are ungrounded.

39. (new) A recloser according to claim 18, wherein

said electronic control recloses said actuator and said circuit interrupter from said open position to said closed position without actuation of said handle mechanism.

40. (new) A recloser according to claim 18, wherein

said electronic control substantially simultaneously triggers said actuator to move said circuit interrupter from said closed to said open position and moves said handle mechanism from said first position to said second position during permanent fault conditions.

41. (new) A recloser according to claim 18, wherein

said actuator is disposed adjacent said circuit interrupter without insulation disposed therebetween.